

REMARKS

Claims 1-8 and 13-21 have been amended. Claims 1-8 and 13-21 remain for further consideration. No new matter has been added.

The objections and rejections shall be taken up in the order presented in the Official Action.

1-2. Claim 1 currently stands rejected for allegedly being indefinite for a lack of proper antecedent basis.

Claim 1 has been amended to correct the antecedent.

3-4. Claims 1-3, 6-8, 13-15 and 19-20 currently stand rejected for allegedly being anticipated by the subject matter disclosed in U.S. Patent 6,344,385 to Jun et al (hereinafter "Jun").

Claim 1

As amended, claim 1 recites an electrostatic discharge protective device that includes:

"where the electrostatic discharge protective structure is located between the first and second potential busses and drains off an overvoltage pulse to one of the first and second potential busses, where the electrostatic discharge diode includes a gate electrode located between the first region and the second region, the first region being separated from the second region by a distance that is equal to a width dimension of the gate electrode, and where the gate electrode and the second region are both directly connected to the second supply potential." (emphasis added, cl. 1).

Claim 1 has been amended to now recite that the gate electrode and the second region are both directly connected to the second supply potential.

Upon a fair and proper reading, Jun fails to disclose or suggest a gate electrode and a second region being both directly connected to the second supply potential. As shown in FIG. 3A of Jun, the gate 35 is connected to an RC network, while the p+ implant 36 in Jun is connected to ground.

Thus, Jun clearly discloses that the gate 35 and the p+ implant 36 are not both directly connected to the second supply potential; i.e., ground. As such, Jun fails to anticipate the subject matter of claim 1, since Jun fails to disclose at least the feature of “*where the gate electrode and the second region are both directly connected to the second supply potential.*” (cl. 1).

As a result, it is submitted that the anticipation rejection of amended claim 1, together with its dependent claims 2-3, 6-8 and 19, is moot and should be removed, and that amended claim 1, together with claims 2-3, 6-8 and 19, are in condition for allowance and should be passed to issuance.

Claim 13

As amended, claim 13 recites an integrated circuit with electrostatic discharge protection, comprising, *inter alia*, “*(iii) a gate electrode having a width W and located between the first and second regions such that the first and second regions are separated by the width W, where the gate electrode and the second region are both directly connected to the same electrical potential.*” (emphasis added).

Claim 13 has been amended to now recite that the gate electrode and the second region are both directly connected to the same electrical potential.

As set forth hereinabove with respect to amended claim 1, Jun neither discloses nor suggests the feature that the gate electrode and the second region are both directly connected to the same electrical potential. Instead, Jun discloses that the gate 35 is connected to an RC circuit, while the p+ region 36 is connected to Ground. Therefore, it is respectfully submitted that Jun is incapable of anticipating the subject matter of amended claim 13.

As a result, it is submitted that the anticipation rejection of amended claim 13 together with

its dependent claims 14-15 and 20, is moot and should be removed, and that amended claim 13, together with claims 14-15 and 20, are in condition for allowance and should be passed to issuance.

5-6. Claim 4 currently stands rejected for allegedly being obvious in view of Jun.

Claim 4 depends indirectly from claim 1, which is patentable for at least the reasons set forth above.

7. Claim 5 currently stands rejected for allegedly being obvious in view of the combined subject matter disclosed in Jun and U.S. Patent 6,060,752 to Williams (hereinafter "Williams").

Claim 5 depends indirectly from claim 1, which is patentable for at least the reasons set forth above.

8. Claims 16-18 and 21 currently stand rejected for allegedly being obvious in view of the combined subject matter disclosed in Jun and U.S. Patent 6,015,993 to Voldman (hereinafter "Voldman").

Claim 16

As amended claim 16 recites an integrated circuit with electrostatic discharge protection, including, *inter alia*:

"(iv) a second electrode in communication with the second doped region, the second electrode being directly connected to the second voltage bus;

(v) an insulator located between the first and second electrodes, and having an insulator dimension that is equal to the distance between the first and second regions; and

(vi) a gate electrode in communication with and contiguous with the insulator and having a width equal to the width separating the first doped region and the second doped region, where the gate electrode is directly connected to the second voltage bus." (emphasis added, cl. 16)

Claim 16 has been amended to now recite that the second electrode and the gate electrode are both directly connected to the second voltage bus.

Similar to the detailed discussion above with respect to amended claims 1 and 13, Jun neither discloses nor suggests that the second electrode and the gate electrode are both directly connected to the second voltage bus. Instead, Jun discloses that the gate 35 is connected to an RC circuit, while the p+ region 36 is connected to Ground. Accordingly, it is respectfully submitted that Jun is incapable of being combined with Voldman to render obvious amended claim 16.

Further, assuming for the moment that Jun and Voldman are properly combinable, without admitting as much, even if the references were combined as alleged in the Official Action, the resultant combination still fails to disclose the feature of amended claim 16 of both the gate electrode and the second electrode being connected to the second voltage bus.

As a result, it is submitted that the obviousness rejection of amended claim 16, together with its dependent claims 17-18 and 21, is moot and should be removed, and that amended claim 16, together with claims 17-18 and 21, are in condition for allowance and should be passed to issuance.

For all the foregoing reasons, reconsideration and allowance of claims 1-8 and 13-21 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,

Patrick O'Shea

Patrick J. O'Shea
Registration No. 35,305
O'Shea, Getz & Kosakowski, P.C.
1500 Main Street, Suite 912
Springfield, Massachusetts 01115
Telephone: (413) 731-3100 x102